



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,241	01/16/2004	Kristy L. Birt	END920030052US I(1397-9U)	7209
68786 7590 03/03/2009 CHRISTOPHER & WEISBERG, P.A. 200 EAST LAS OLAS BOULEVARD SUITE 2040 FORT LAUDERDALE, FL 33301				
EXAMINER ALMEIDA, DEVIN E				
ART UNIT 2432		PAPER NUMBER		
MAIL DATE 03/03/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/759,241  
Filing Date: January 16, 2004  
Appellant(s): BIRT ET AL.

---

Alan M. Weisbery  
Reg # 68786  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/02/2008 appealing from the Office action mailed 9/10/2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 10-11, 21-22 and 25-26.

Claims 1, 5, 6, 8, 9, 12, 16, 17, 19, 20, 23, and 27-30 allowed.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

**WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The rejection of claims 1, 5, 6, 8, 9, 12, 16, 17, 19, 20, 23, and 27-30 have been withdrawn.

**REJECTIONS**

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kair (US 7,243,148) in further view of Bellemore (5,944,825).

Claims 10, 11, 21, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kair (US 7,243,148) in view of Bellemore (5,944,825) in further view of Dahlstrom et al (2004/0006704).

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

7243148	Keir et al	7-2007
5944825	Bellemore et al	8-1999
20040006704	Dahlstrom	1-2004

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kair (US 7,243,148) in further view of Bellemore (5,944,825).

With respect to claim 25, Kair teaches the method for providing automated tracking of security vulnerabilities, comprising: using a computer device to perform a security vulnerability assessment on a system (see abstract); detecting the presence of a security vulnerability in the system; and responsive to detecting the presence of the security vulnerability (see column 13 lines 4-20); storing data obtained from the security vulnerability assessment in a security vulnerabilities database (see column 13 lines 4-20 and column 17 lines 27-38); determining using a computer program, a security vulnerability score, the security vulnerability score being a product of a frequency score, a severity score, a criticality score and a trust score (see figure 9-11, 14 and column 62 line 3 – column 66 line 19), the frequency score based on a percentage of host experiencing the detected security vulnerability in the system (see column 64 line 20-50 i.e.  $H_H H_M H_L$ ), the criticality score based on whether at least one of confidential data and personal data in on the system (see column 64 lines 51-67).

Kair fails to explicitly disclose determining a time to fix a security vulnerability identified by the security vulnerability assessment of the system based on the determined security vulnerability score.

Bellemore discloses a method of assessing a particular host for security vulnerabilities in which he teaches determining a time to fix a security vulnerability

identified by the security vulnerability assessment of the system based on the determined security vulnerability score (see Bellemore column 5, lines 16-34). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have given an allotted time for fixing the vulnerability before disabling will occur to protect the system (i.e. password disabling)(see Bellemore column 5, lines 16-34). Therefore one would have been motivated to have set a time limit for security vulnerability to be fixed to increase the security of the system.

**Claims 10, 11, 21, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kair (US 7,243,148) in view of Bellemore (5,944,825) in further view of Dahlstrom et al (2004/0006704).**

With respect to claim 10, 21, and 26, a method for determining a criticality factor for a security vulnerability in a computer system, comprising: Entering in a database security vulnerabilities detected in the computer system during a security vulnerability assessment (see Kair column 13 lines 4-20 and column 17 lines 27-38). Assigning a security vulnerability factor to a detected security vulnerability based upon a criticality of an element in the system, a severity of the security vulnerability with the system and isolation of the system (see Kair column 62 line 3 – column 66 line 19).

Kair does not teach measuring a frequency of occurrence for the detected security vulnerabilities and Assigning a security vulnerability factor to a detected security vulnerability based upon the frequency of occurrence of the security

vulnerability in the system. Dahlstrom teaches Measuring a frequency of occurrence for the detected security vulnerabilities. (see Dahistrom paragraph 0042 and 0067). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have kept track of the frequency security vulnerability occurs to provide an overall summaries of vulnerability tracking within the organization or with respect to a particular product. The tracking information may also include statistical information such as means, medians, ranges, and deviations derived by tracking system (see paragraph 0042). Therefore one would have been motivated to have tracked the security vulnerability.

With respect to claim 11 and 22, wherein the criticality of an element in the system is based on whether at least one of confidential data and personal data in on the system and whether information on the element is used aggregation (see column 64 lines 51-67).

#### **(10) Response to Argument**

In response to applicant's arguments the recitation "a method for determining a criticality factor for security vulnerability in a computer system, comprising:" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190

USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

The claim reads "entering in a database security vulnerabilities detected in the computer system during a security vulnerability assessment" this means more than one security vulnerability in contrast to the argument that it is only one security vulnerability. Also the terms in the claims are given their broadest reasonable interpretation with that said the term computer system does not mean one computer it is reasonable to interpret computer system as more than one computer.

Applicant's arguments have been fully considered but they are not persuasive. Kair teaches the vulnerability score is a product of a frequency score, a severity score, a criticality score and a trust score. Kair teaches  $F$  (the security vulnerability score) is computed by  $F = 100 - V - E$ . Where  $V = \min(70, (70V_hH_h + 42V_mH_m + 14V_lH_l) / H_n)$  and  $E = \min(30, \sum_{y=1}^{H_n} \{R_y + W_y + 30Ty\})$ . In column 64 lines 20-50 Kair teaches the frequency score is based on a percentage of host experiencing the detected security vulnerability in the system. This is calculated in the  $V$  part of the security vulnerability score where  $H_h$ ,  $H_m$ ,  $H_l$  make up the number of host that have high, medium and low vulnerabilities on them. The severity score is also calculated in the  $V$  part of the security vulnerability score where high vulnerability are multiplied by 70 (root access) medium by 42 and low by 14. In column 66 lines 4-19 Kair teaches the criticality score is based on whether at least one of confidential data and personal data is on the system. This is calculated in the  $E$  part of the security vulnerability score  $T_y$  the number of nodes with



Trojan horse that can get access to usernames passwords resources and host data on a node. The isolation score is calculated in the E part of the security vulnerability score. Why the number of wireless access points found on a host y.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Devin Almeida/  
Examiner, Art Unit 2432  
2/23/2009

Conferees:

/Benjamin E Lanier/  
Primary Examiner, Art Unit 2432

/Gilberto Barron Jr./  
Supervisory Patent Examiner, Art Unit 2432